BRIEF IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI.

Opinions of the Court of Claims.

See page 1 of the petition for citation and dates. For the sake of brevity they are omitted here.

Jurisdiction.

The grounds of jurisdiction are:

1. The date of the judgment to be reviewed is March 3, 1941.

2. The judgment was rendered in a suit in the United States Court of Claims brought under the provisions of the Act of June 25, 1910 (36 Stat. L. 851), and the Act of July 1, 1918 (40 Stat. L. 705), to determine the issues of validity and infringement of letters patent of invention.

3. The jurisdiction of this Court is invoked under Sec. 240, subsection 3 (b) of the Act of February 13, 1925, as amended by the Act of May 22, 1939.

4. Rules, and authorities believed to sustain the jurisdiction of this Court are cited in support of ground 1, for the grant of the writ of certiorari, page 23, of the petition *ante*, and for sake of brevity are omitted here.

Statement of Facts.

The facts are sufficiently stated in the petition. See pages 6-22, *ante*.

Specification of Errors.

The specification of errors which petitioner will urge if the writ of certiorari is granted are, that the Court of Claims erred:

1. On the findings made as a conclusion of law, deciding that respondent's structure did not infringe the claims of petitioner's patent.

2. On finding corresponding members in combination in respondent's structure to the members of the combination in petitioner's invention in a more or less degree, as a conclusion of law in deciding that infringement is avoided, although one of the members of the combination recess members is present in respondent's structure it was not intended incidental to the construction and served no purpose.

3. On finding corresponding members in combination in respondent's structure to the members in combination in petitioner's invention in a more or less degree as a conclusion of law deciding that infringement is avoided, although the recess member of the combination is present in respondent's structure because respondent in addition thereto has also provided an improvement in the form of an increase of horsepower.

4. In considering and determining the issue of infringement in only making comparison of profiles, forms, positions, proportion, and degree of the members of the combinations of petitioner's invention and respondent's structure. The Court of Claims should have compared the objects, functions, means of functioning, mode of operation, and result attained.

5. In considering and determining the issue of infringement in applying such a strict and narrow construction to petitioner's patent, thus depriving petitioner of the application of the well-known patent law doctrine of equivalency in requiring that an equivalent blister or bulkhead member must surround the bottom of the hull; that an equivalent streamline member, the bottom of the blister, must rise from bow end to the stern end; that an equivalent recess member must be single, inwardly extending and central to the bottom of the hull.

6. In failing and refusing, in considering and determining the issue of infringement to apply the patent law doctrine of equivalency as between the petitioner's and respondent's structure.

7. In considering and determining the issue of infringement in failing to decide as a conclusion of law that respondent's blister or bulkhead structure was equivalent to petitioner's blister or bulkhead structure; that the rise of the bottom of respondent's blister or bulkhead structure from frame 70 to the stern and frame 54 to the bow was equivalent to the rise of the bottom of petitioner's blister or bulkhead structure from the bow end to the stern end and that the two recesses provided in respondent's structure are equivalent to the single longitudinal inwardly extending recess of petitioner's invention and that respondent infringed the claims of petitioner's patent.

8. In failing and refusing to find and decide as a conclusion of law that petitioner's patent is a pioneer or one of high rank entitled to a broad range of equivalents, and liberal treatment, and broad enough to cover respondent's structure.

9. In intimating a construction of petitioner's patent that the combination thereof is a mere aggregation and not a patentable combination.

Summary of Argument.

The points of the argument follow the grounds relied on for the granting of the writ of certiorari and are stated on pages 22-28 of the petition *ante*, and for sake of brevity, they are omitted at this point.

POINT I.

The writ of certiorari should be granted because of the sharp conflict in the findings and conclusions of law thereon by the Court of Claims. This case involves subject matter

of paramount public importance which is the first line of defense in the battleship fleet of the Navy and a valuable patent of improved hull construction, the essence and principles of which are used by the respondent in the reconstructed underwater body of its ships and because of present day developments in naval construction and armaments, the importance is more accelerated. Improved hull construction is of great public importance to naval and commercial ship construction. The Court of Claims has also intimated in its opinion that petitioner's combination patent is a mere aggregation and therefore invalid which casts a cloud on its validity (R. 34), and there is no likelihood of the patent ever being litigated again, all of which warrants a review by this Court (see facts and law cited, Reason I, for granting of writ of certiorari, petition, pages 22 and 23, *ante*).

POINT II.

As we have made clear in the petition, a comparison and analysis of the claim language of petitioner's patent with respondent's structure proves that they are similar in numbers of the combination. (Petition, pages 6, 7, and 8, *ante*.) That is, both structures comprise a combination as follows: (a) a vessel comprising a hull, (b) a blister or bulkhead structure thereon, (c) a streamline member, which is provided by the bottom of the blister rising up, (d) a recess member.

The Court of Claims finds the foregoing to be true, but as a conclusion of law decides that infringement is avoided, (1) because the blister or bulkhead structure differs from petitioner in that it does not surround the bottom of the hull, clearly this difference does not avoid infringement, if it is kept in mind the object and purpose of the blister in both cases is to add displacement, reduce the draft, and protect the hull. This results in the only difference being one of location, proportion, and degree of the blister member

applied to the hull. This, as a matter of law, does not avoid infringement. As was said by this Court in an early case, "The exclusive right to the thing patented is not secured if the public are at liberty to make substantial copies of it, varying its form or proportion," *Winans* v. *Denmead,* 15 Howard, (56 U. S.) 330, 343, 344, and on this point the Court of Claims said in substance, the difference in size, proportion, and degree will not avoid infringement, *Societe Anonyme Des Anciens Establissments Cail* v. *The United States,* 43 Ct. Cls., 25 aff. 224 U. S. 309, *supra; Welin Davet Boat Corp.* v. *United States,* 78 Ct. Cls., 772, 785, 786, *supra,* although the Court of Claims did not follow this rule in the case at Bar. In addition to the foregoing, the respondent had already provided the hulls of its ships with an inner and outer bottom, comprising a double bottom and together this double bottom is identically equivalent to the blister surrounding the bottom. For illustration of double bottom, see drawing 1, appendix, P. 41. (2) The Court of Claims decided as a conclusion of law, that infringement was avoided because the bottom of the blister in respondent's structure does not rise from bow end to stern end, but the bottom of respondent's blister rises from frame 70 to the stern and from frame 54 to the bow, the entire bottom of the blister in both cases rises, the purpose of which is to streamline the hull and help on the speed. This difference of the rise in the bottom of the two blisters does not avoid infringement. The only difference is in the division and direction of the rise of the streamline and the effect is the same in both cases, and the law is well settled on this point (see streamline of the bottom of the blister of respondent's ships illustrated by reproduced drawing thereof, drawing 2 in the appendix, P. 42). (3) The Court of Claims finds that respondent has provided two recesses on the bottom of its ships instead of a single and inwardly extending recess of petitioner's invention, and says because of this

difference infringement was avoided. The law is well settled that this difference does not avoid infringement (see authorities cited in Reason 3, for the grant of certiorari, petition, Pp. 24 and 25, *ante*). The recesses provided on respondent's ships are in line with the propellers, a pair of which are in the stern, on either side of the hull (see R. 1 and R. 2, marked in red lines representing recesses and P. 1 and P. 2, marked in red representing propellers on inner bottom drawing, Fig. 2, Plaintiff's exhibit 8 original, by reference made a part of Finding 10 (R. 20)). See longitudinal recess illustrated on respondent's ships by reproduced drawing of "Mississippi", appendix, drawing 3, P. 43, and illustrated cross section of recesses, reproduced cross sectional drawing of "Mississippi", defendant's exhibit 17 as drawing 4, appendix, P. 44, which clearly illustrates a cross section of the battleship "Mississippi" showing the blisters, recesses, and inner bottom as applied. This drawing was submitted by the Navy Department as defendant's exhibit 17. See also the recess illustrated in the stern of the battleship "Mississippi" in line with the propellers by reproduced drawing at frame 118, plaintiff's exhibit 8, by reference made a part of finding 10 (R. 20), as drawing 5, appendix, P. 45. Compare these illustrated drawings of the recesses in respondent's ships with the longitudinal recess in petitioner's invention as illustrated by reproduced drawing of recess on petitioner's ships as drawing 6, appendix, P. 46. See also recesses on the "Mississippi" construction illustrated by reproduced and enlarged drawing of recesses as drawing 7, appendix, P. 47. The British applied the blister or bulkhead structure without the recess or recesses in combination. The Court of Claims so found (last paragraph, Finding 22, R. 31), and the effect was detrimental on the speed as we have already seen (see footnote 12, petition, P. 16, *ante*). Compare the reproduced drawing 8, appendix, P. 48, of cross section of British ship

without the recess in combination with the reproduced drawings of petitioner's and respondent's ships with the recesses in combination. The difference is clearly apparent.

The Court of Claims found and decided as a conclusion of law that there was an increase of speed in respondent's ships after application of the recesses in combination (see footnote 12 of the petition, pp. 16 and 17, *ante*). The Court of Claims found that there was an increase of speed, notwithstanding an increase of displacement of 3,000 tons and additional load of deck armor carried.

It is clear from all the foregoing that respondent has made a substantial close copy of petitioner's invention and appropriated the essence and principles thereof and infringes the claims of petitioner's patent (see authorities cited in Reason 2, for granting writ of certiorari, petition, p. 24. (4) The Court of Claims decided as a conclusion of law that infringement was avoided because the recess member in respondent's structure was not intended, incidental to the construction, and serves no purpose. It is clear that respondent uses in combination in its structure a recess member and obtains the result of increased speed, attributed to it, notwithstanding 3,000 tons of additional displacement added to its vessels and an additional load of deck armor. As a matter of law, such defense does not avoid infringement (see authorities cited in Reason 3 for granting of certiorari, petition, p. 24, *ante*). (5) The Court of Claims also decided as a conclusion of law that infringement was avoided because in addition to the recess member provided in respondent's structure it also had provided an improvement by way of increase of horsepower. As a matter of law this does not avoid infringement (see authorities cited in Reason 4 for granting of certiorari, petition, pp. 25, 26, *ante*). The law is well settled if there is doubt as to infringement it should be resolved in favor of petitioner's patent. *Smith* v. *Snow,* 294 U. S. 1, 14, 16; *Hobbs* v. *Beach,* 180 U. S. 383-401;

Avernox Corp. v. *Nurawald Radio Corp.*, 15 F. Supp. 279 286.

POINT III.

The Court of Claims in determining infringement, erroneously only compared profiles, forms, proportion, and degree of the members of the combination as between petitioner's and respondent's structures, respectfully, this is not the rule by which to determine infringement. The Court should have compared means, principle of operation, and result obtained. *Machine Company* v. *Murphy*, 97 U. S. 120, 124, 126; *Western Electric Company* v. *Larue*, 139 U. S. 601, 606, *supra.*

POINT IV.

The strict and narrow construction applied to petitioner's patent, with reference to respondent's structure in requiring that an equivalent blister member must surround the bottom of the hull and that the equivalent streamline member must rise from bow end to stern end, and that the equivalent recess member must be a single inwardly extending recess and central to the bottom of the hull, is such a strict and narrow construction that precludes the application of the patent law doctrine of equivalency, which patent law doctrine permits variations in divisions, multiplication, position, proportion, and degree of the members of the combination and denies to plaintiff's patent the patent law doctrine of equivalency and renders petitioner's patent valueless, as was said by Mr. Walker in his work on patents, "Combination patents would generally be valueless in the absence of the right of equivalents; for few combinations now exist, or can hereafter be made which do not contain at least one element, and efficient substitute for which could readily be suggested by any persons skilled in the particular art." (Section 350, pp. 345, 346, Walker, Patents, Fifth Edition). For other authorities see those cited in Reason 6 for granting of certiorari, petition, p. 27.

Point V.

The Court of Claims refused to appraise the value of petitioner's invention, stating that it was not necessary to a decision of the case to do so. The petitioner contends that in this the Court of Claims is in error, that the respondent did not use any of the structures heretofore known or appearing in the prior art and the speedy and extensive adoption of plaintiff's invention are facts in harmony with the proof that petitioner's combination with the recess member contained just what prior art structures lacked. *Consolidated Valve Co.* v. *Crosby Valve Co.*, 113 U. S. 157, 179. The Court of Claims construed petitioner's patent with reference to the prior art (Findings 21 and 22, R. 26-31), and decided as a conclusion of law that the petitioner's patent was not anticipated by the prior art. The prior art conclusively shows that no combination of members had been combined into one invention as petitioner's prior thereto, and the Court of Claims also held that petitioner's invention rests upon the combination of the features stated in its claims (Finding 24, R. 32). Pending consideration of the application for petitioner's patent in the patent office, no prior art was cited (Finding 21, R. 26-27). It is clear from the prior art and the history of petitioner's patent that no combination of members had performed the function of adding displacement, protecting the hull, and increasing the speed and improving the operation of the ship until petitioner's invention. No invention existing prior to petitioner's is shown to have accomplished that operation. We have already seen that the respondent has made a substantial copy of petitioner's invention and after tests on the first two of its ships it speedily applied the substantial copy to the remaining eleven ships in its modernization program. The respondent, in the case at bar, was unable to point out, and the petitioner has been unable to find any operative combination of a marine vessel comprising a hull, a longitudinal,

laterally extending exterior bulkhead, and a longitudinal, inwardly extending recess, earlier than the patent in suit. All the foregoing, petitioner contends supports its contention that its invention is a pioneer or at least one of high rank and entitled to liberal treatment (for citation of authorities see those cited in Reason 8 for the granting of certiorari, petition, pp. 27 and 28, *ante*).

Point VI.

The Court of Claims, in its opinion, intimates that petitioner's invention is a mere aggregation and not a patentable combination. In this the Court is in error. All the objects and functions of the elements in combination of the claims of the patent in suit point to the elements, functioning and coacting together to produce a novel, new, and useful result in increased and improved qualities of a vessel as a whole in speed, safety, efficient operation, navigation and seaworthiness.

The patent, Plaintiff's Exhibit 2, by reference made a part of Finding 4 (R. 14), specifies to provide the hull with compartments or bulkhead (lines 16-18, p. 1). That is to say, in addition to its providing watertight compartments (lines 40-51, p. 2). These compartments or bulkhead combined in a longitudinal laterally extending exterior bulkhead structure (Claim 1, lines 53-54, p. 2). Decrease the draft of the vessel to a possible minimum whereby its speed is increased (lines 13-15, p. 1). The bulkhead structure by reason of its width decrease considerably the draft of the hull, increasing its speed when moving through the water. Now a further help in aiding on the speed and coacting with the bulkhead member is that the bottom of the bulkhead structure which is also the bottom of the hull, is shaped by the provision of the recess member, so that the propellers and rudder receive at all times a free and solid flow of water for their efficient operation (lines 22-26, p. 1. See also lines 11-15, p. 1). Said bottom being shaped to provide a recess mem-

ber (Claim 1, lines 57-59, p. 2, patent in suit, by reference made a part of Finding 4 (R. 14)). The propellers are provided in line with this recess (lines 9-11, p. 2). It is clear from the foregoing and especially to one skilled in the art, that the blister or bulkhead member decreasing the draft helps increase the speed and streamline member helps on the speed, and the recess at the same time affords the propellers with a continuous, free, and solid flow of water for their efficient operation, which also helps on the speed and co-acting together they produce a new and useful result of improved and increased speed.

Therefore, it is obvious that the blister or bulkhead member, the streamline member, and the recess member co-acting, helping on the speed and the blister member functioning as a ballasting device which steadies and trims the vessel in navigation and prevents careening, rolling, and pitching, and the provision of protection; that all of these desired functions come into play when the vessel is in motion in the water, and it is obvious that they all act and co-act together in producing a new and novel result exemplified in an improved vessel in every aspect of safety, speed, navigation and seaworthiness, so that there is an increased and improved qualities of speed, safety, navigation and seaworthiness of the vessel as a whole never made possible by any other invention.

It is therefore clear that plaintiff's invention comprised of the elements set forth in the claims, co-act together to produce as a whole a vessel whose hull is protected; speed, operation, navigation, seaworthiness is increased and improved, which is a new, novel and useful result in hull construction never attained by any prior invention.

It is, therefore, clear that plaintiff's invention is a new device of a distinct character and function, because none of the prior art patents and publications have been found that disclose a complete or equivalent structure. The com-

bination in plaintiff's invention introduces a number of variables which together combined in a final result as a whole a speedier, safer and more able ship than had ever been produced before and therefore a new and useful result as defined in *Loom Co.* v. *Higgins,* 105 U. S. 580, 591, *supra.* The new results attained by the plaintiff's invention are several. No ship before plaintiff's had ever been protected and at the same time increased and improved speed, with greater displacement, enabling the carrying of a heavier load, greater stability and other beneficial features. But these are not an aggregate of separate and unrelated results. Each and every one of these results are intimately tied up and depending on the others. It is obvious, therefore, that the various results are obtained by the co-action and integrated function of all the members of the invention.

In *Loom Co.* v. *Higgins, supra,* the new and useful result attained was an increase of speed of the machine whereby the weaving of carpet was increased from 40 yards to 50 yards per day, and the court held this was no aggregation but a valuable and patentable invention. It is clearly analogous to the facts of the case at bar.

Conclusion.

The petitioner respectfully and urgently contends that the writ of certiorari should be granted and that the case be reviewed by this Court and that the decision of the Court of Claims be reversed and a decision that petitioner's patent is valid and infringed on all its claims.

Respectfully submitted,

HARRY S. HALL,
Attorney for Petitioner.

GEORGE GORDON BATTLE, ESQ.,
Of Counsel.

(4715)

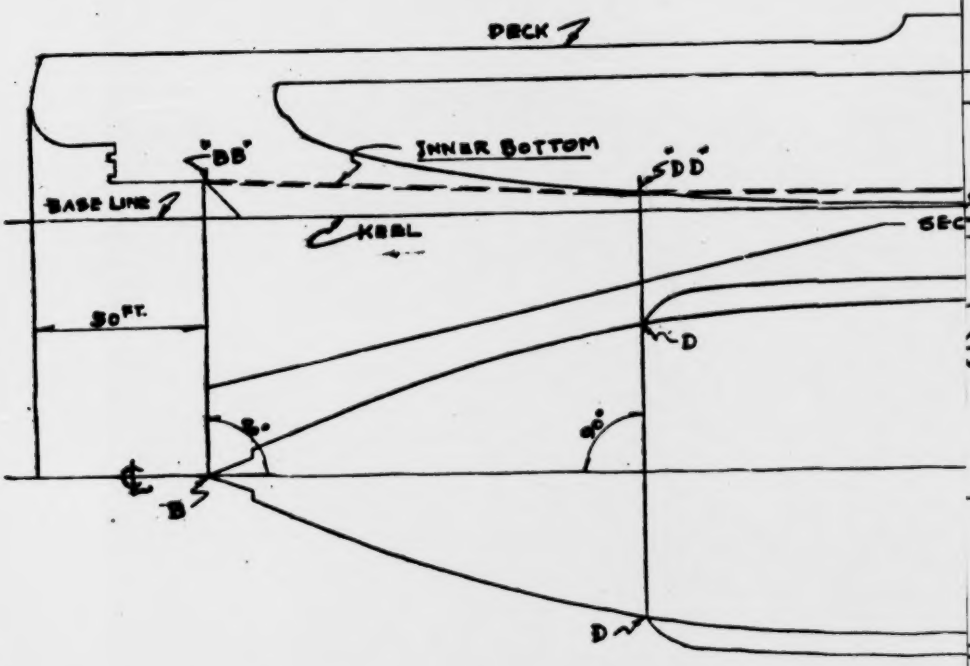
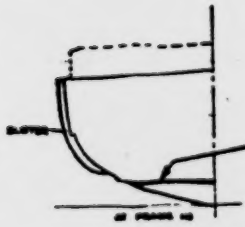
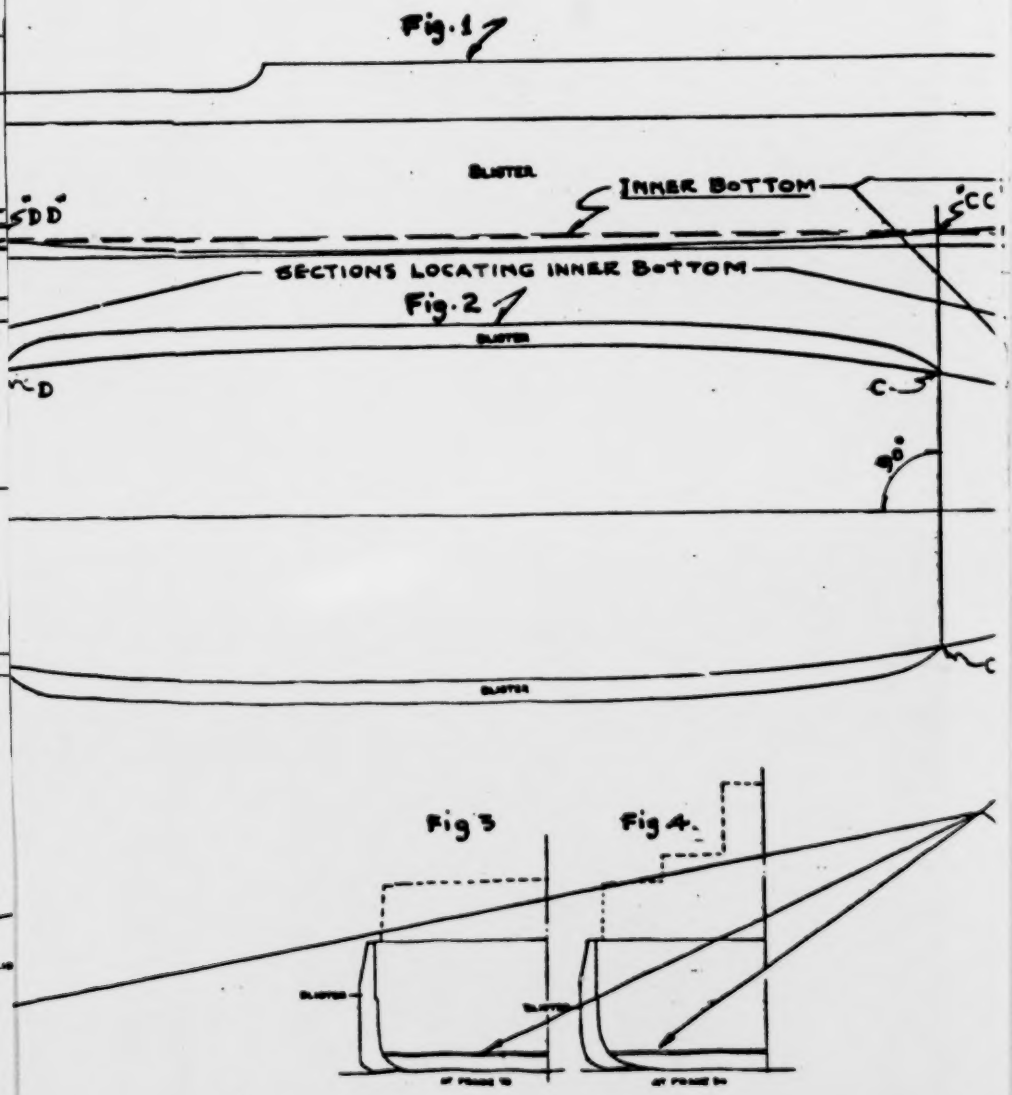


Fig 5

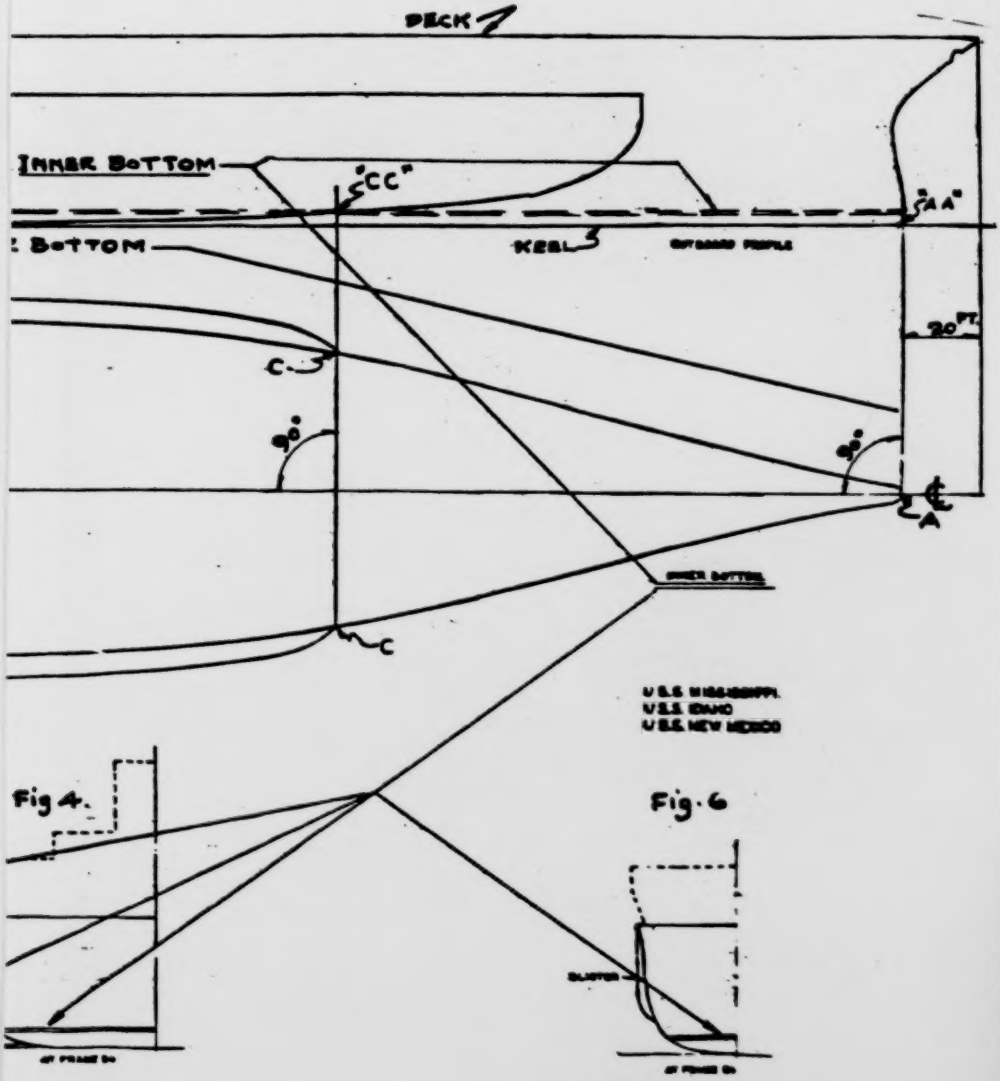


Reproduction of plaintiff's exhibit 8 to illustrate inner bottom Fig. Fig. 1, comprising double or bulkhead bottom in MISSISSIPPI construct



trate inner bottom Fig. 2 and outboard profile drawing,
n MISSISSIPPI construction or alleged infringing structure.

E-2



drawing,
ing structure.

PLAINTIFFS EXHIBIT NO 8
Drawing 1.

E-3

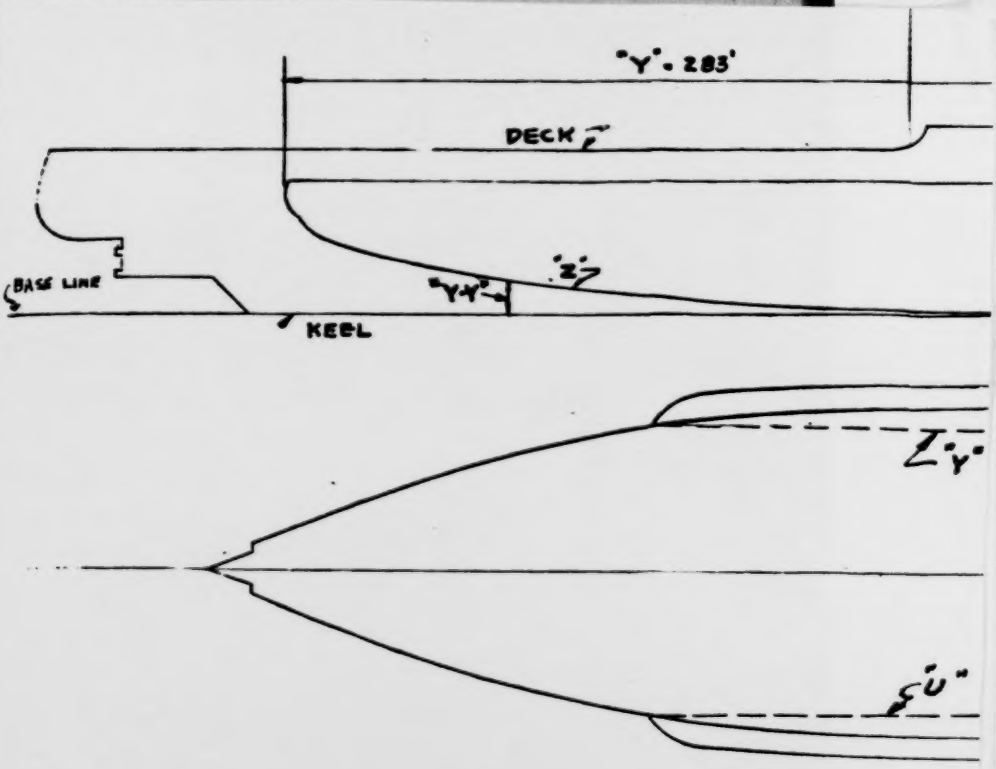
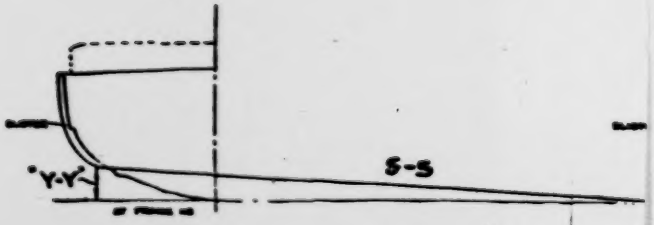
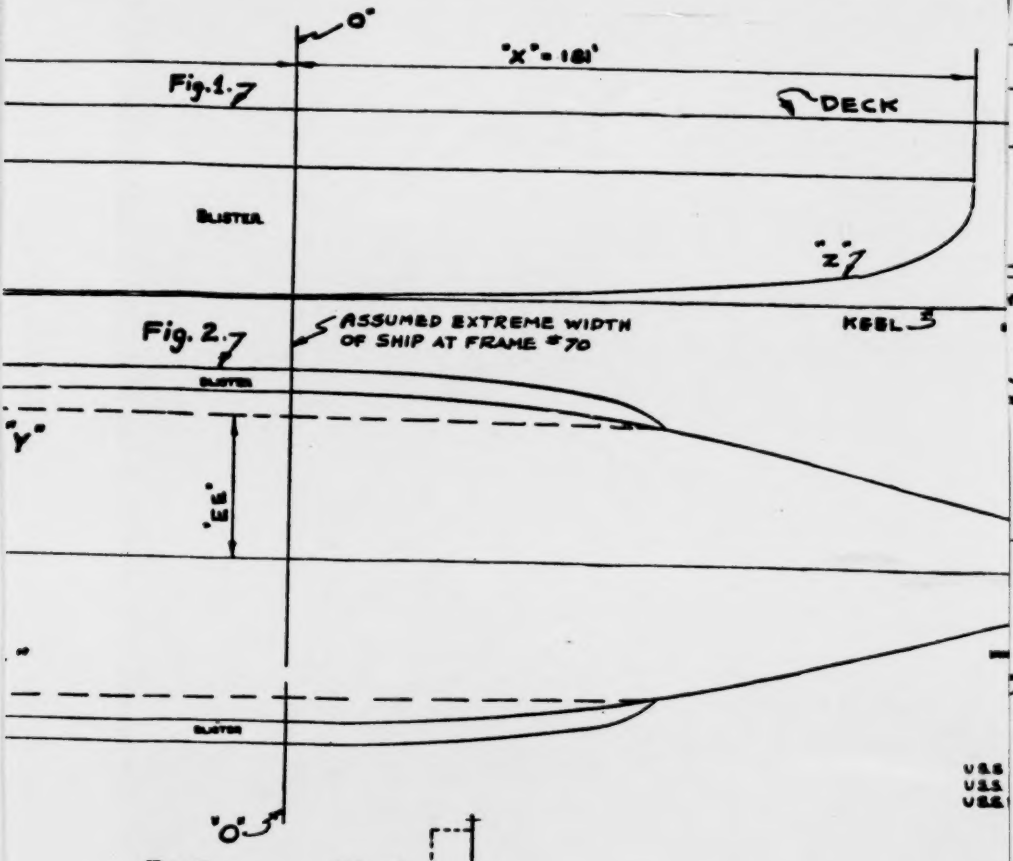
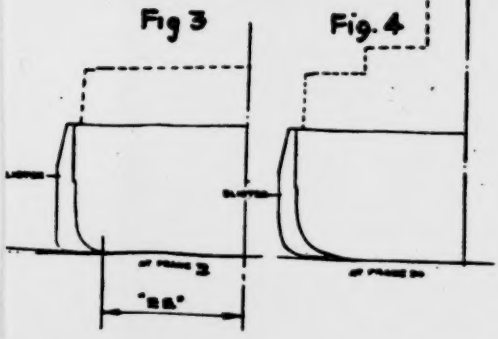


Fig.5



Reproduction of Plaintiff's Exhibit 8, to illustrate rising of the bo
blister and double or bulkhead bottom of the hull towards the stern,
keel along base line, fore and aft and deck, dotted lines on either s
blister joins on the bottom of hull MISSISSIPPI construction.





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straight
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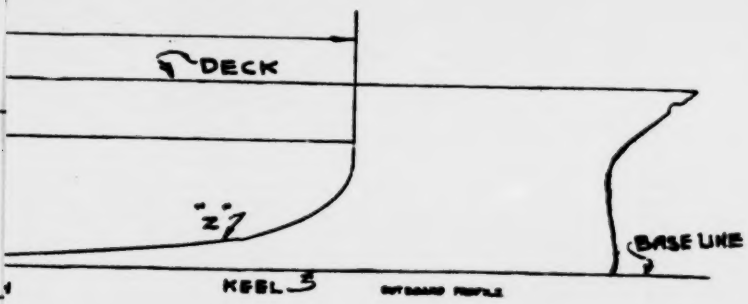
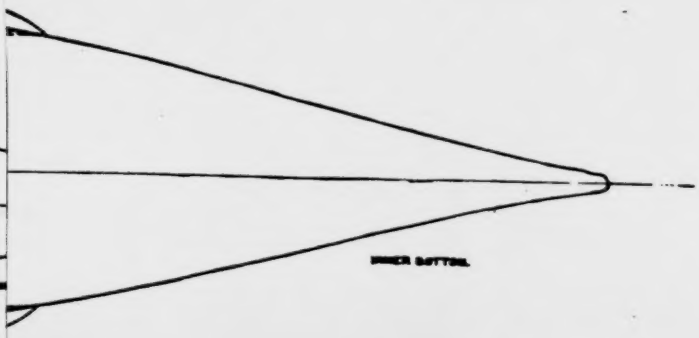
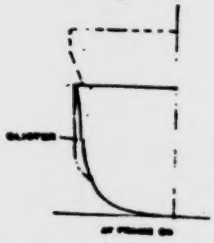
PLAINTIFFS EXH
Drawing





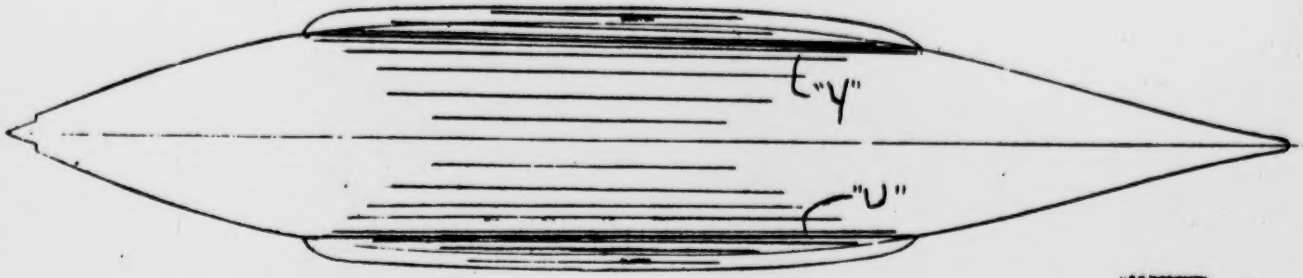
U.S.S. MISSISSIPPI
U.S.S. IDAHO
U.S.S. NEW MEXICO

Fig. 6



PLAINTIFFS EXHIBIT No 8
Drawing . 2.
E-6

The two longitudinal recesses, one on either side of the bottom of the hull in the MISSISSIPPI, are illustrated by the longitudinal lines on either side thereof.

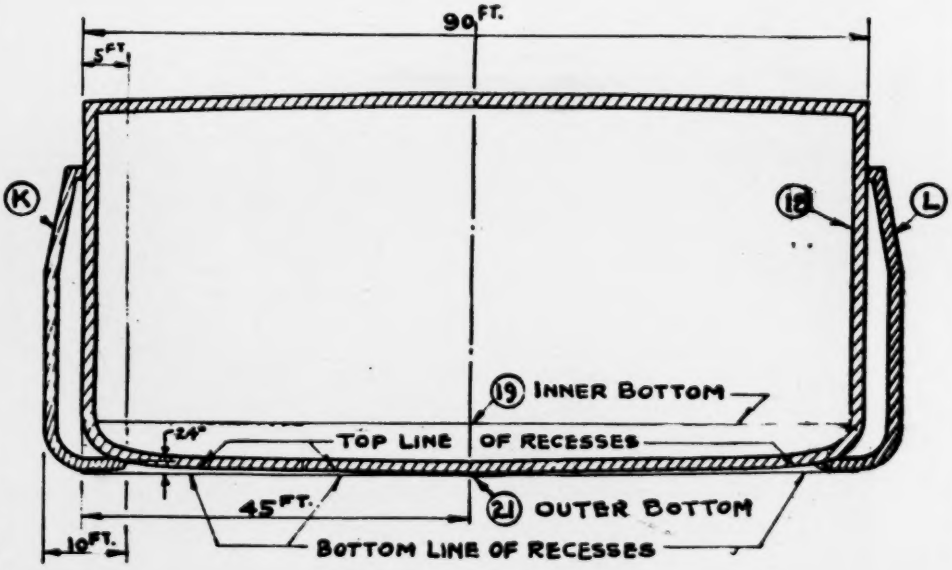


E-7

Drawing 3.

Reproduction cross section MISSISSIPPI, Defendant's Exhibit 17, illustrating cross section longitudinal recesses; inner and outer bottom; comprising double bottom and blisters or bulkhead structures.

SKETCH OF SECTION OF
U.S.S. MISSISSIPPI FOR COMPARISON WITH WOODEN MODEL (PLAINTIFF'S EXHIBIT NO. 43) IN SUIT OF THE MAR-DE-PASSY CORPORATION, COURT OF CLAIMS NO. 42,694.

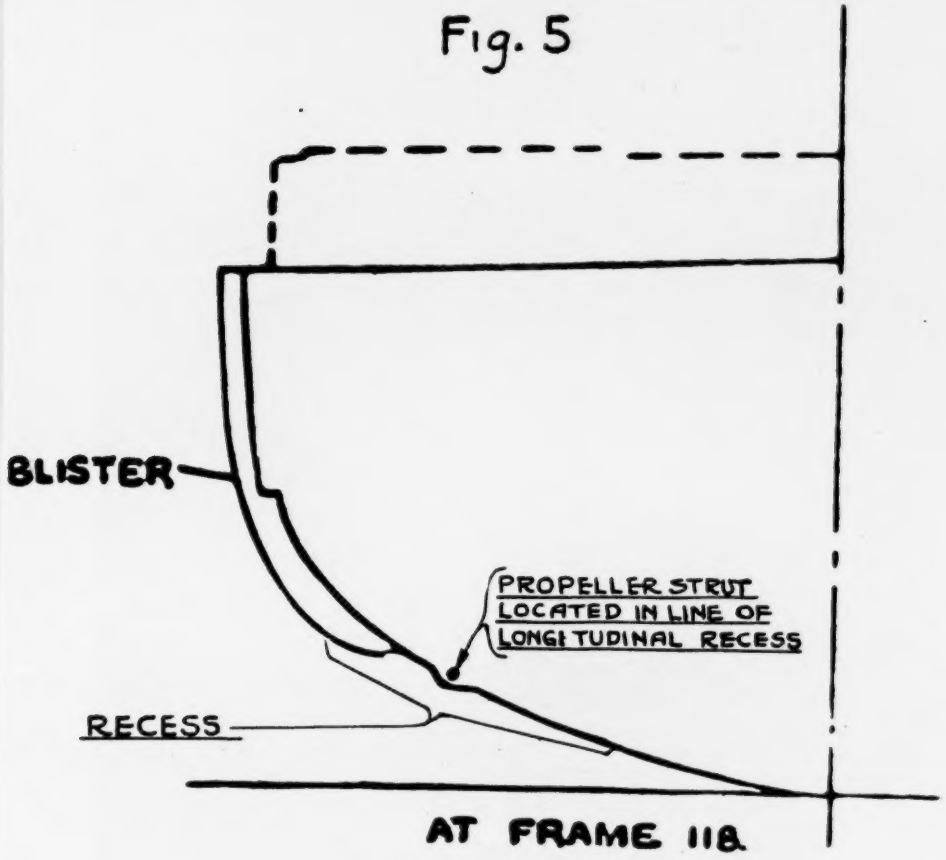


013491.

Drawing 4.

E-8

Fig. 5



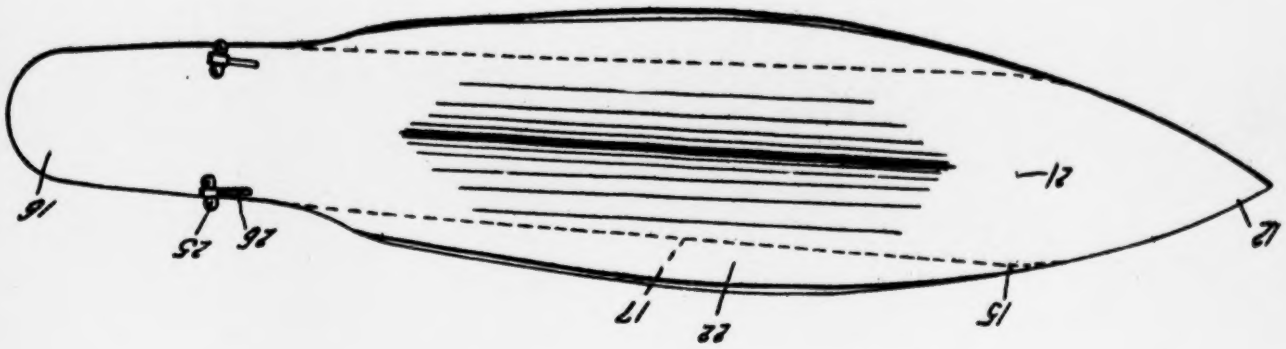
Reproduction of frame 118, Fig. 5, plaintiff's exhibit 8, to illustrate longitudinal recess in the stern in line with propellers and propeller strut.

Drawing 5.

45

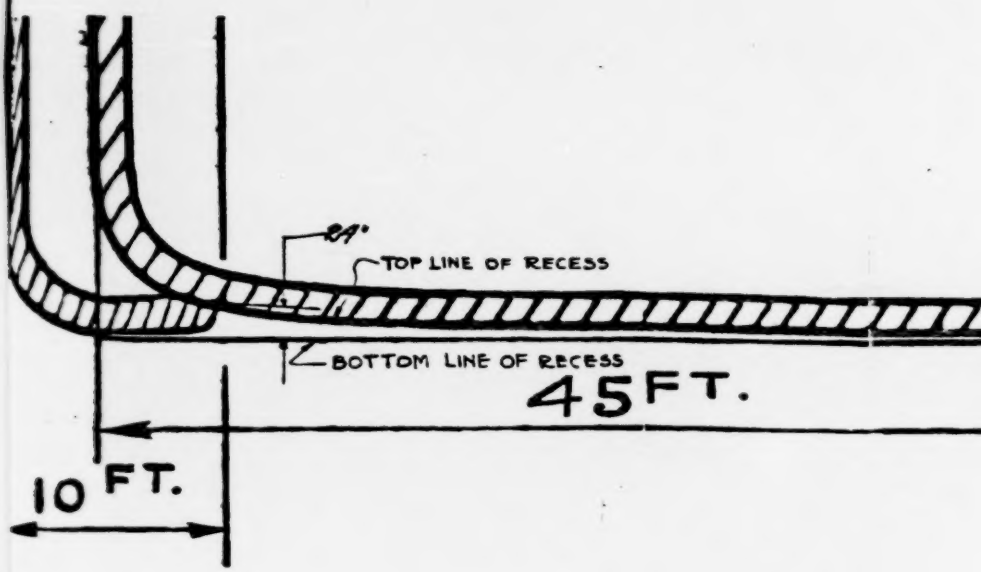
E-9

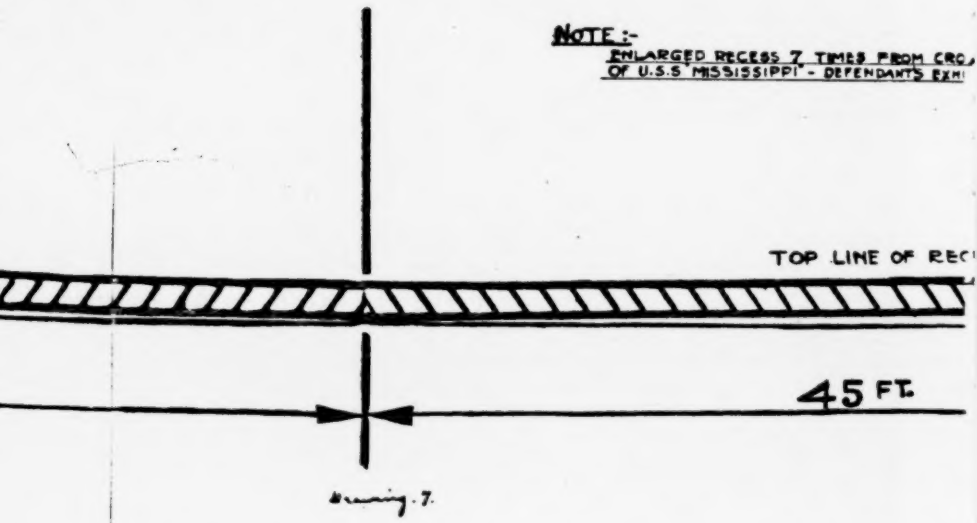
The longitudinal inwardly extending recess in the bottom of the hull, invention patent in suit illustrated by the longitudinal lines in the bottom thereof. Fig 7. Patent in suit Plaintiff's Exhibit 2 By reference made a part of finding 4. (R 19)



E-10

Drawing .6.

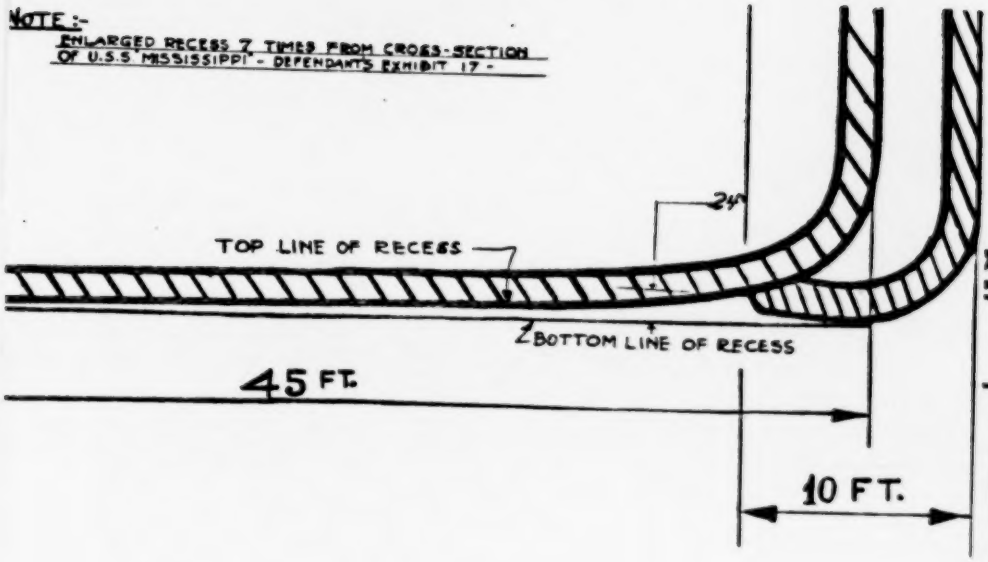

24"
TOP LINE OF RECESS
BOTTOM LINE OF RECESS
45FT.
10 FT.


NOTE :-
ENLARGED RECESS 7 TIMES FROM CRO
OF U.S.S MISSISSIPPI - DEFENDANTS EXH
TOP LINE OF REC
45 FT.

Drawing. 7.

E-D

NOTE:-
ENLARGED RECESS 7 TIMES FROM CROSS-SECTION OF U.S.S MISSISSIPPI - DEFENDANT'S EXHIBIT 17 -



Reproduction of cross section of British ship, Fig. A, Page 28 (90), Defendant's exhibit 12, by reference made a part of Finding 21, R. 31, 32, which illustrates application of blister or bulkhead structure without recess or recesses in combination and on test proved bad effect on propeller performance and detrimental on speed.

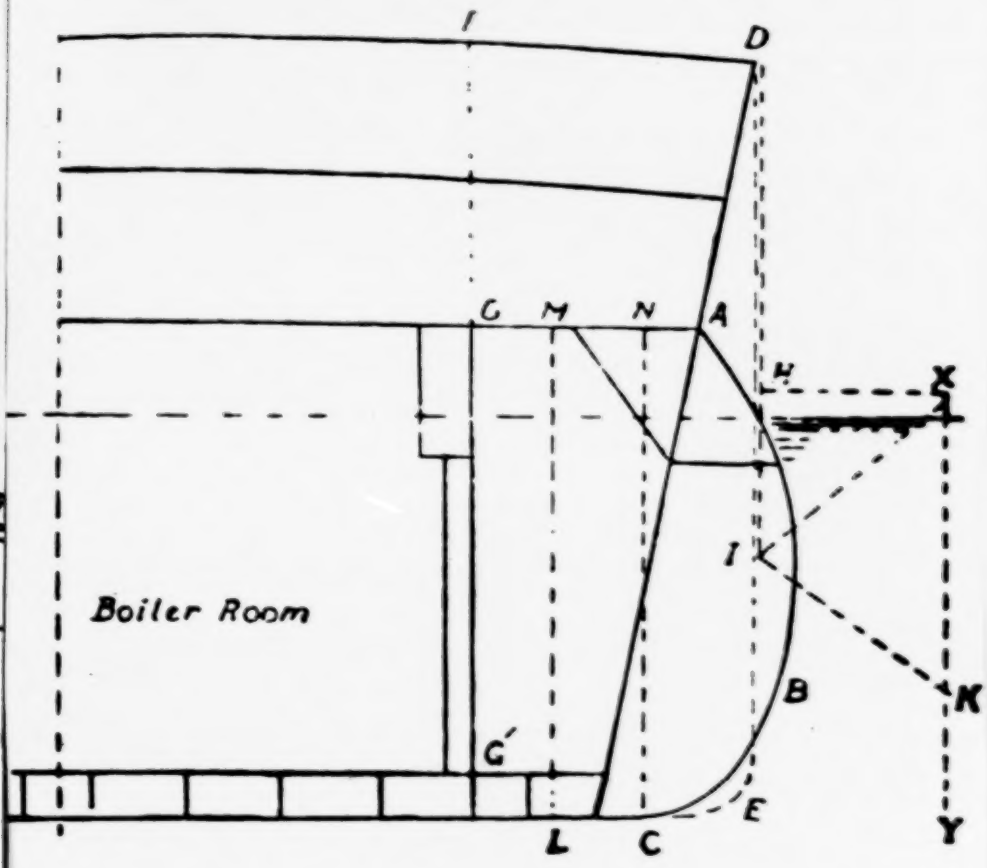


FIG. A.

Drawing 8.

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